



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

D135-692-041
Job Sheet 173227



Part No: D135-692-041

Job Qty: 8 ea

Part Name: EC135 Bearpaw Wearplates



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 2/27/18

Job Tracking No:

Due Date: 3/19/18

Created By: Linda Lacelle

Type: SOLD

Description:

Note: DWG DSI9400 REV A, DSI9750 REV A IPP Rev:A new issue ECN1089 08-02-04 DD verified by:EC IPP
Rev:B ECN 1132 08-02-20 DD verified by:EC

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	8 Ea	3/19/18	3/19/18	0.00	0.00	Start Up Stores/Pkg-1		MAR 13 2018
110	Packaging	8 pcs	3/19/18	3/19/18	0.00	0.00	Packaging1-1		MAR 13 2018
120	QC	8 pcs	3/19/18	3/19/18	0.00	0.00	QC4		M.D.
125	DC	8 pcs	3/19/18	3/19/18	0.00	0.00	DC		M.D.
130	Packaging	8 pcs	3/19/18	3/19/18	0.00	0.00	Packaging3-1	DAS 21	MAR 14 2018
140	QC21-FG	8 Ea	3/19/18	3/19/18	0.00	0.00	QC21	9-85	F9128

Part Op 125 - Photocopy bluefile and create labels per PPP D135-692-041 CHG002

Descriptions: 130 - Identify and pack for shipping as per PPP D135-692-041 CHG001 PPP Rev:

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
AN4-11A	Bolt	32 Ea (4 ea)	90-Start up Operation	
AN4-13A	Bolt	64 Ea (8 ea)	90-Start up Operation	
D2529	Washer	64 Ea (8 ea)	90-Start up Operation	
D3719-041	Wearplate Assembly	16 Ea (2 ea)	90-Start up Operation	3048835
MS21042L4	Nut	96 Ea (12 ea)	90-Start up Operation	
NAS1149D0463J	Washer	64 Ea (8 ea)	90-Start up Operation	

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
90-Start up Operation	AN4-11A	32	186	0
	AN4-13A	64	459	0
	D2529	64	2,892	0
	D3719-041	16	4	0
	MS21042L4	96	990	0
	NAS1149D0463J	64	2,248	0

001257

Part Specifications

Specifications could not be found.

DOA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width:100%;"> <tr> <td>Skid-tube ☐</td> <td>Cross tube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>				Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																							
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Date : _____	Step #: _____	QTY Effective : _____		MRB (QS1042) Approval _____																																																							
Description Work Order Dev: _____ Dart Aerospace Ltd. 1270 Aberdeen Street Markham, ON L3R 9K7 CANADA TEL: 1 813 632-5200 Email: sales@dartaero.com www.dartaerospace.com DART AEROSPACE Container No: S050565 Part: D135-692-041 Job No: 173227 Serial No/Batch: S050565 Revision: _____ Inspector: _____ Date: 03/13/18				Completed By _____ ad hand / Supervisor approval Verification _____ QC / QA Coordinator Approval _____																																																							
Root Cause <table style="width:100%;"> <tr><td>Environment ☐</td><td>No Re-verification ☐</td></tr> <tr><td>Design ☐</td><td>Operator ☐</td></tr> <tr><td>Doc/Data ☐</td><td>Offset/Setup ☐</td></tr> <tr><td>Equip/Tooling ☐</td><td>Supplier ☐</td></tr> <tr><td>Handling/Pre ☐</td><td>Training ☐</td></tr> <tr><td>Material ☐</td><td>Use for Testing ☐</td></tr> <tr><td>Internal Transport ☐</td><td>Poor Information ☐</td></tr> <tr><td>Tribal Knowledge ☐</td><td>Rushing ☐</td></tr> <tr><td>LOA ☐</td><td>Product Improvement ☐</td></tr> <tr><td>Substation ☐</td><td>Process Improvement ☐</td></tr> <tr><td>Past Expiry Date ☐</td><td>Manufacturing Process ☐</td></tr> <tr><td>Misidentified ☐</td><td>Past Due ☐</td></tr> </table>		Environment ☐	No Re-verification ☐	Design ☐	Operator ☐	Doc/Data ☐	Offset/Setup ☐	Equip/Tooling ☐	Supplier ☐	Handling/Pre ☐	Training ☐	Material ☐	Use for Testing ☐	Internal Transport ☐	Poor Information ☐	Tribal Knowledge ☐	Rushing ☐	LOA ☐	Product Improvement ☐	Substation ☐	Process Improvement ☐	Past Expiry Date ☐	Manufacturing Process ☐	Misidentified ☐	Past Due ☐	<table style="width:100%;"> <tr> <td>Cracks ☐</td> <td>Inspection ☐</td> <td>Positioned Wrong ☐</td> </tr> <tr> <td>Crimp/Kink/Ripple/Wave ☐</td> <td>Contamination ☐</td> <td>Outside Dimensions ☐</td> </tr> <tr> <td>Cuffs ☐</td> <td>Countersink ☐</td> <td>Over/Under tolerance ☐</td> </tr> <tr> <td>Crushing ☐</td> <td>Cut Too Short ☐</td> <td>Part Incorrect ☐</td> </tr> <tr> <td>Heat Treat ☐</td> <td>Instructions Incomplete/Unclear ☐</td> <td>Part Lost/Missing ☐</td> </tr> <tr> <td>Wave/Twist in Tube ☐</td> <td>Drill Holes ☐</td> <td>Part Moved ☐</td> </tr> <tr> <td>Marks/Chatter ☐</td> <td></td> <td>Drawing ☐</td> </tr> <tr> <td></td> <td></td> <td>Finish ☐</td> </tr> <tr> <td></td> <td></td> <td>Misread ☐</td> </tr> <tr> <td></td> <td></td> <td>Turning Sequence ☐</td> </tr> </table>				Cracks ☐	Inspection ☐	Positioned Wrong ☐	Crimp/Kink/Ripple/Wave ☐	Contamination ☐	Outside Dimensions ☐	Cuffs ☐	Countersink ☐	Over/Under tolerance ☐	Crushing ☐	Cut Too Short ☐	Part Incorrect ☐	Heat Treat ☐	Instructions Incomplete/Unclear ☐	Part Lost/Missing ☐	Wave/Twist in Tube ☐	Drill Holes ☐	Part Moved ☐	Marks/Chatter ☐		Drawing ☐			Finish ☐			Misread ☐			Turning Sequence ☐
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Container View (Active) - Master Unit Containers

Master Unit No	Container No	Part No	Part Name	From Container	Current Location	Quantity
001254	S046415	AN4-11A	Bolt	s017090	ST344	32
001254	S046414	AN4-13A	Bolt	s027722	ST344	64
001254	S046416	D2529	Washer	S019348	ST008	64
001254	S019454	D3719-041	Wearplate Assembly	S021217	ST186	4
001254	S046413	MS21042L4	Nut	s016351	ST303	96
001254	S046412	NAS1149D0463J	Washer	s027736	ST263	64

Note: Ad hoc query view of Part.dbo.Container where Container.Active = 1.

D 3719-041 ————— S048835 X12 Plex 2/28/18 11:18 AM dart.quirion.sonia



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001254	S050564	D3719-041	Wearplate Assembly	s048835	ST186	12
001254	S046413	MS21042L4	Nut	s016351	ST303	96
001254	S046412	NAS1149D0463J	Washer	s027736	ST263	64

Note: Ad hoc query view of Part.dbo.Container where Container.Active = 1.

Plex 3/13/18 9:29 AM Dart.joly,jocelyne

PAGE 1 OF 1

Description: BEARPAW WEARPLATE INSTALLATION

[illegible]

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
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Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

3.0 PARTS LIST

REFERENCE ONLY

The DSI 9750-011 Clamp Relocation Kit can be procured from Dart to install D135-692-041 on D135-692-011 at CHG 002 and earlier, and includes hardware for Qty 2x skid tubes.

Qty -011	Part Number	Description
X	DSI 9750-011	Clamp Relocation Kit
8	D2529	WASHER
4	AN4-11A	BOLT
4	MS21042L4	NUT

The parts list for IIN-D135-692 and ICA-D135-692 is amended as follows:

Qty -011	Qty -041	Part Number	Description
X		D135-692-011	BEARPAW INSTALLATION
	X	D135-692-041	WEARPLATE KIT
4		D2182B060	RUBBER CUSHION
8		D2274	RADIUS BLOCK
2		D3049-1	BEARPAW
8	8	D2529	WASHER
4		D2519	CLAMP
	2	D3719-041	WEARPLATE
	4	AN4-11A	BOLT
8	8	AN4-13A	BOLT
8	12	MS21042L4	NUT (OR MS21042-4)
8	8	NAS1149D0463J	WASHER
4		QS100M24S	CLAMP

4.0 WEIGHT AND BALANCE

There is a negligible weight and balance change associated with this modification.

DESIGN	ML	DART AEROSPACE USA, INC. EUGENE, OR	
DRAWN	ML		
CHECKED	<i>up</i>	DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9750	SHEET 2 OF 5
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	INSTALL MODIFICATION	NTS
DATE	16.06.01	COPYRIGHT © 2016 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	